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GENERAL HOUSEPLANT CARE

Caring for houseplants can be a mysterious and slightly confusing project for both the beginning and the experienced indoor gardener. This is further complicated by the diversity of plants which are available, all of which appear to have specific requirements for growth. General plant care is more straightforward when one considers the basic needs of every plant- water, soil, fertilizer, and light.

Most plants will do well in bright indirect light or curtain-filtered sunlight. Very hot afternoon sun in summer can scald leaves. Plants should be kept away from cold windowpanes or direct sources of heat such as radiators, wood stoves, television sets, or heating vents. Cold air from air conditioners and drafts is also very damaging.

Extreme variations in day and night temperatures should be avoided. Most plants will flourish with temperatures in the 60's and 70's. However, some plants such as Christmas cactus, cyclamen, and certain orchids will flower better with cool night temperatures in the 50's and low 60's.

Low humidity and dry air can be trouble for some plants in homes with forced air winter heating and summer cooling systems. Misting will not significantly benefit plants since it does not supply a constant and uniform amount of moisture in the air. To raise humidity, potted plants can be set in glass or plexi-glass enclosures, which simulate a greenhouse. There should be openings so that the pots can be removed for watering and other care and to allow for good air circulation. Another solution is to set the pots on moist gravel in plastic trays. The gravel should be deep enough so that water will saturate the stones on the bottom and leave the upper levels dry. In this way, the pot will never come in direct contact with the water. Bowls of water can also be set in and among the potted plants to help increase the humidity in the air circulating directly around the plants. Most plants will eventually adapt to the drier air although they may at first react to the difference between greenhouse and home environments by dropping leaves.

Drainage is important for almost every plant. There are very few plants that will tolerate saturated soil and lack of soil oxygen for any length of time. For this reason, all pots, regardless of their composition, should have openings in the bottom for water drainage. A layer of stones or broken pottery pieces can be placed in the bottom of the pot before any soil is added. This permits rapid drainage and good soil aeration. The type of soil used to pot plants should be well

draining. A mixture of equal parts of loam (or garden soil), humus (e.g., leaf mold, peat moss), and either coarse sand or perlite is usually sufficient. Vermiculite and bone meal may also be added. When loam or garden soil is used, it should be pasteurized before use by heating at 180 F for ½ hour. This helps to kill any potentially harmful plant pathogens that might be present in the soil. Commercial potting mixes are also available. The primary types are soil-base and soilless mixes. If packaged mixes are heavy (i.e., have a very fine particle size and small air pores), they can be lightened by mixing with sand, vermiculite, or perlite.

Planting or repotting is best done in the spring or early summer. This is when plants are actively growing and are generally under minimal stress. When transplanting, care should be taken to repot plants at the same soil level at which they were originally growing. Do not plant any deeper or shallower or they may not survive. The soil around the roots should be firmed but not to excess. Allow about ½ to 1 inch of space between the top of the soil and the rim of the pot. Enough water should be added to thoroughly soak the soil mass and drain out of the bottom. This will settle the soil securely around the roots. Pour off the excess water. Do not fertilize newly potted plants for at least 6 weeks.

Improper watering (under- or overwatering) is responsible for many problems with houseplants. Water should be applied from the top of the soil and the entire soil mass thoroughly moistened until run-off. This flushes the soil of soluble salts from fertilizers that would otherwise remain in the soil and buildup to potentially toxic levels. By watering in this manner, all roots in the pot receive water and a sturdy, deep, root system develops.

Excess water should be discarded and the pot never left to sit directly in water. If a plant is too large to be lifted or carried to the sink, the pot may be set on bricks, flat stones, or any other object that will raise the pot above the water draining into the saucer. Most plants should not be watered again until the soil surface is dry to the touch. Unfortunately, it is not possible to put watering on a strict schedule since the amount of water used by the plant varies with weather, season, root area, pot size and composition, soil type, and plant species.

For most plants, fertilizing once every month or 6 weeks is sufficient from March to September. They can be fed less often if one wishes to limit growth. Plants should be allowed to rest without fertilizer over the winter months. Foliage plants can be fed with any well-balanced, general-purpose fertilizer containing nitrogen, phosphorus, and potassium (N-P-K). Houseplant fertilizers labeled for use on flowering plants meet this requirement. Liquid concentrates or crystals (powders) that are diluted with water are the best forms to use. Acid-forming fertilizers should only be used on acid loving plants such as azaleas or gardenias. It is very important, even in this case, to use such a fertilizer only when the soil has been tested and found to be too alkaline. Constant use of acid fertilizer can result in extreme soil acidity and can cause problems with nutrient deficiencies, stunted growth, and even death. These fertilizers may be periodically used on acid loving plants.

Some houseplants require more specific care than this general guide. Some examples are orchids, cyclamen, and bromeliads. However, for the great majority of plants, these guidelines for care will foster healthy, attractive, and enjoyable houseplants.

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